DUBUT, P., [illegible]; ZEMBERG, M., inzh.

[illegible] three-program reproducer. Radio no.7:59,61 Jl '65.
(MIRA 18:9)

BROMBERG, E.D.; SHENBERG, M.G.

Course of neurodystrophic processes as dependent on the reactivity of the organism. Probl. stom. 5:5-14 '60. (MIRA 15:2)

1. Khar'kovskiy meditsinskiy stomatologicheskiy institut.
(TRIGEMINAL NERVE) (NERVOUS SYSTEM--DEGENERATION AND REGENERATION)

SHENBOR, M. I.

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
Fuels and Carbonization Products

Chlorination of Ukrainian brown coal. A. E. Kretov, M. I. Savin, M. I. Shenbor, and I. E. Lev (Chem. Technol. Inst., Dnepropetrovsk). *Ukrain. Khim. Zhur.* 18, 71–7 (1952) (in Russian).—Ukrainian brown coal [illegible] ri ted, yielding products that are sol [illegible] are reactive. The products can be used as [illegible] resins and film-forming materials. The [illegible] a light brown to orange and contain up to [illegible] Chlorination is possible in CCl_4 medium or in the presence of H_2O; in the latter case the reaction is substantially complete within 10 hrs. at 0–60° temp. range. G. M. K.

9-16-54

[redacted], A. I.

"Chlorination of Ukrainian Lignite." Cand Chem Sci, Dnepropetrovsk Chemicotechnological Inst, Dnepropetrovsk, 1954. (KChKhim, No [redacted], Mar 55)

So: Sum. No. 470, 2, Sept 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

SHENBOR, M.I.

fuel V 1791. ACTIVITY OF CHLORINE IN THE CHLORINATION OF BROWN COAL. Shenbor, M.I., Kretov, A.E. and Savin, M.I. (Ukr. Khim. Zh. (Ukr. Chem. J.), 1955, Vol. 21, 636-640; abstr. in Chem. Abstr., 1956, vol 50, 6771). Chlorination was carried out in aqueous chlorine solution at 20° and 100°, the weight ratio of coal to water being 1:7 and chlorine being introduced with a bubbler at the rate of 0.75 cc./min./g. sample. Chlorination was also achieved with (1:15, 0.5 cc./min./g.) at 100°, 200°, and 325° in a Kjeldahl flask. The periods of chlorination were 100 and 144 hrs., respectively. Results from the two reagents differed only slightly, the difference being the amount of substituted chlorine. Tests were run on a Ukranian brown coal which was 12.2% bituminous, as well as on separate bituminous and nonbituminous components. Tables of elemental analyses of the chlorination products, and of results of hydrolysis of these for 24 hrs. in water and aqueous potassium hydroxide showed that the nonbituminous and bituminous portions reacted similarly, the degree of chlorination in all cases increasing with a rise in temperature (25-61% Cl by weight); and showed also that the aromaticity of the sample chosen was 42%. The results of exhaustive chlorination give an indication of the percentage aromaticity because the process is accompanied by a scission of the peripheral chains of the aromatic part of the molecules. Chlorination was found to give more reliable data on aromaticity than oxidation. C.A.

3

Shenbor, M. I.

USSR/ Chemistry - Organic chemistry

Card 1/1 Pub. 116 - 14/29

Authors : Savin, M. I., and Shenbor, M. I.

Title : Condensation of chlorinated coal with aromatic hydrocarbons

Periodical : Ukr. khim. zhur. 21/6, 754-756, Dec 1955

Abstract : Experiments showed that chlorinated brown coal condenses easily with aromatic hydrocarbons in the presence of $AlCl_3$. The condensation products also submit to sulfurization and nitration. A reduction of the nitro-derivatives into amines results in the formation of diazo-compounds which enter into combination reaction leading to the formation of water soluble dyes. It was shown that chlorinated brown coal can be utilized in the role of basic raw material for the derivation of new variegated chemical compounds. One USSR reference (1952).

Institution : Dnepropetrovsk Metallurgical Inst. im. I. V. Stalin

Submitted : March 28, 1955

SHENBOR, M.I.; KRETOV, A.Ye.; SAVIN, M.I.

Effect of organic solvents on chlorinated lignite. Ukr.khim. zhur. 22 no.4:546-549 '56. (MIRA 10:10)

1.Dnepropetrovskiy khimiko-tekhnologicheskiy institut.
(Solvents) (Lignite)

5 (1, 2, 3)

AUTHORS: Shenbor, M. I., Burmistrov, S. I., SOV/153-2-2-14/31
Lepskaya, N. M.

TITLE: Chlorine Substitutes of Diphenoxy Ethane (Khlorzameshchennyye difenoksietana)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1959, Vol 2, Nr 2, pp 215-218 (USSR)

ABSTRACT: While searching for active insecticides, the authors made the synthesis of the substances mentioned in the title (diphenyl ether of ethylene glycol). Diaryl oxy ethanes are easily made of phenolene and dichlorethane. Some are efficient against mites (Ref 1). They perhaps also kill weeds after their oxidation into aryl oxy acetic acid for which the mentioned activity has been proved. The oxidation may take place in the soil through a vital activity of the bacteria. Among the substances mentioned in the title, the following are known in publications: 2,2'-dichlorodiphenoxyethane, 4,4'-dichlorodiphenoxyethane (Ref 1), 2,4,2',4'-tetrachlorodiphenoxyethane, and 2,4,6,2',4',6'-hexachlorodiphenoxyethane (Ref 3). Asymmetric chlorine substitutes of diphenoxyethane have not been described up to now. The authors obtained symmetric chlorine substitutes of diphenoxyethane by

Card 1/3

means of the influence of dichloroethane (with less active compounds of dibromoethane) on phenolate, in an alcoholic solution. In the case of the highly chlorinated phenols, the reaction is shown under atmospheric pressure. Therefore the synthesis with such diphenyloxyethanes was performed with dibromoethanes, and in a solution of glycol. This made it possible to raise the temperature up to 130°, and to shorten the time of reaction. It is possible, without any doubt, to use dichloroethane under high pressure. Symmetric chlorine substitutes were produced of α-aryloxy-β-chloroethane with the corresponding phenols in an alkylic solution. Tables 1 and 2 show the results. All synthesized substances are solid and nonvolatile, insoluble in water and soluble in organic solvents. The increase in the number of halogen atoms raises the melting temperature in the series of symmetrical compounds (Table 1); the melting temperature in a fully chlorinated product is 217°. As expected, the melting points of the asymmetric chlorine substitutes on the whole are lower than those of symmetric compounds (Table 2). Furthermore it was found that a direct chlorination of diphenoxyethane makes it possible to produce some chlorine substitutes:

Chlorine Substitutes of Diphenoxy Ethane SOV/153-2-2-14/31

2,4,2',4'-tetrachlorodiphenoxyethane (output 56 %). A mixture of chlorine substitutes which cannot be crystallized and of which no individual compounds can be isolated, is left from the mixture of the chlorination products to the admission of the 4 chlorine atoms into the diphenoxyethane molecule, after the isolation of the 2,4,2',4'-tetrachlorodiphenoxyethane took place in the rest. A more intensive chlorination of diphenoxyethane takes place much more slowly. A complicated mixture of products develops in this process. There are 2 tables and 4 references, 1 of which is Soviet.

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskiy institut; Kafedra tekhnologii osnovnogo organicheskogo sinteza i SK (Dnepropetrovsk Chemical and Technological Institute, Chair of Technology of Basic Organic Synthesis and SR (Synthetic Rubber,)

SUBMITTED: March 18, 1958

Card 3/3

S/153/61/004/005/003/005
E142/E485

AUTHORS: Shenbor, M.I., Burmistrov, S.I., Ivanov, A.A.

TITLE: Increasing the yield of acrylonitrile during the thermal dehydration of ethylene cyanhydrin

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy SSSR. Khimiya i khimicheskaya tekhnologiya, v.4, no.5, 1961, 837-842

TEXT: Large quantities of acrylonitrile (AN) can be obtained by the thermal liquid phase dehydration of ethylene cyanhydrin (ECH). The process is carried out at a temperature of 170 to 240°C, in the presence or absence of a catalyst. During this process by-products are formed which decrease the yield of AN and therefore increase production costs. Experiments were carried out on increasing the yield of AN by improving the reaction conditions during the liquid phase dehydration process. The authors evaluated the efficiency of some catalysts mentioned in literature (NaCl and sodium formiate, HCOOK, $(HCOO)_2Ca$, $(HCOO)_2Cu$, $(HCOO)_2Zn$ and $(HCOO)_3Al$), tested new dehydration catalysts and investigated the effect of temperature and of agitating the reaction medium on the yield of the end-product.

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Increasing the yield ...

The starting material ECH contained 93.2% of the basic material, 0.05% HCN, 1.75% amines and 5% of vat residue. This substance was placed in a 250 ml flask and heated in a wood tube. The authors used a so-called "reinforced" resin which they prepared by dehydrating 14 ml of ECH at 209 to 210°C for 90 min; the addition of this resin accelerated the process considerably. The upper layer of AN was neutralized in a separating funnel with 10% H_2SO_4, to separate ammonia and the amine bases, freed from the acidic aqueous layer and subjected the same to azeotropic distillation. Each distillation stage gave 45% of a fraction boiling between 68 and 75°C (which contained water) and 55% of a fraction with a boiling point between 75 to 88°C, the latter being AN. The first fraction was redistilled and this process was repeated four times. The H_2SO_4 solution (after neutralization of the upper layer) and the water were additionally steam distilled; this insured complete separation of AN. The heat transfer and even distribution of temperature in the reaction medium were improved by mechanical agitation (220 rev/min); this increased the yield of AN by 3%. Investigations on the effect of temperature showed that the process is rather slow at a temperature below 180°C;

Increasing the yield ...

a 57% yield of AN was obtained at 170°C. The yield of the resin reached a minimum on increasing the temperature to 110°C and above that temperature the yield of ECH increased again. The most satisfactory yields and lowest resin formation occur at a temperature between 209 and 210°C. Some of the experiments were carried out whilst using a saturated solution of NaCl and bubbling CO_2 through; a 77% yield was obtained; the yield of AN increased to 80% when using NaCl without CO_2. Further experiments indicated that the catalytic dehydration of ECH in a current of nitrogen did not affect the yield of AN. Sodium formiate was most effective amongst the salts of formic acid (when used as catalyst). Experiments in which mixtures of two catalysts were used indicated that these mixtures had no higher catalytic activity than the individual components themselves. These experimental data were used for calculating parameters of an industrial plant with an annual output of 5000 ton AN and it was found that highly satisfactory results were obtained when carrying out the dehydration process with a sodium formiate catalyst at 210°C. There are 1 table and 12 references: 2 Soviet-bloc and 10 non-Soviet-bloc. The four most recent

references to English language publications read as follows:
Ref.6: US Pat. 2436774 (1948); Chem. Abstrs., 42, 3773 (1949);
Ref.7: US Pat. 2461492 (1949); Chem. Abstrs., 43, 3836 (1949);
Ref.8: US Pat. 269L452 (1954); Chem. Abstrs., 17, 11689 (1955),
Canad.Pat. 511735 (1955); Canad.Pat. 511732 (1955);
Ref.9: US Pat. 2501651 (1950); Chem. Abstrs., 44, 5375 (1950).

ASSOCIATION: Dnepropetrovskiy khimiko-tekhnologicheskiy institut im. F.E.Dzerzhinskogo. Kafedra tekhnologii osnovnogo organicheskogo sinteza i SK (Dnepropetrovsk Institute of Chemical Technology im. F.E.Dzerzhinskiy. Department of Technology of Basic Organic Synthesis and SK)

SUBMITTED: May 23, 1960

SHENBOR, M.I.; BURMISTROV, S.I.; MALINOVSKIY, A.A.

Arylamides and alkylamides of 3,6-dichlorophthalic acid. Izv.vys.ucheb.zav; khim.i khim.tekh. 4 no.5:869-871 '61. (MIRA 14:11)

1. Dnepropetrovskiy khimiko-tekhnologicheskiy institut imeni F.E. Dzerzhinskogo, kafedra tekhnologii osnovnogo organicheskogo sinteza i sinteticheskogo kauchuka.
(Phthalic acid) (Amides)

SOV/24-58-10-4/34

AUTHOR: Shenbrot, I. M. (Moscow)

TITLE: Ferrite-Transistor Circuits in Control Systems (Ferrito-tranzistornyye yacheyki v skhemakh upravleniya)

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye tekhnicheskikh nauk, 1958, Nr 10, pp 18-26 (USSR)

ABSTRACT: The use of ferrites in transistorized circuits, particularly in relation to digital systems, is reviewed from the theoretical point of view, assuming rectangular hysteresis loops for the cores (used as in Fig.1) and linearized transistor characteristics (Fig.3). The first section deals with the transients to be expected in such circuits, and the second with uses as rectangular pulse shapers; the third deals briefly with their use as storage elements. The paper contains 8 figures, 7 references, 2 of which are Soviet and 5 English.

SUBMITTED: January 27, 1958.

Card 1/1

SHENBROT, Isidor Markovich; MALOV, V.S., red.; SHIROKOVA, M.M., tekhn. red.

[Centralized control of technological processes] TSentralizovannyi kontrol' tekhnologicheskikh protsessov. Moskva, Gos. energ. izd-vo, 1961. 95 p. (Biblioteka po avtomatike, no.40) (MIRA 14:10)
(Automatic control)

KUPERSHMIDT, Ya.A. (Moskva); MALOV, V.S. (Moskva); SHENBROT, I.M. (Moskva)

Present-day trends in the development of dispatcher control systems using digital computers. Avtom.i telem. 22 no.7:954-959 Jl '61. (MIRA 14:6)

(Electronic digital computers) (Information theory)

S/081/62/000/013/017/054
B158/B144

AUTHOR: Shentrot, I. M.

TITLE: Apparatus for central control of continuous technological processes

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 13, 1962, 359, abstract 13I125 (Sb. "Primeneniye vychisl. tekhn. dlya avtomatiz. proiz-va". M., Mashgiz, 1961, 329-341)

TEXT: Information functions of central control devices and methods of signalling, measuring and recording are considered. [Abstracter's note: Complete translation.]

Card 1/1

SHENBROT, I.M. (Moskva)

Calcuation of the principal parameters of limit-setting and deviation control devices. Avtom.i telem. 23 no.10:1323-1333
(Automatic control)

TEMNIKOV, Fedor Yevgen'yevich; SHENBROT, I.M., red.; BUL'DYAYEV, N.A., tekhn. red.

[Theory of scanning systems] Teoriia razvertyvaiushchikh sistem. Moskva, Gosenergoizdat, 1963. 167 p. (MIRA 16:6)
(Pulse techniques (Electronics))
(Electronic apparatus and appliances) (Electronics)

SHENNIKOT, I.M.

Graphoanalytic determination of the mean square of a methodical error in discrete measurement. Izm. tekh. no.8:6-10 Ag '63. (MIRA 16:10)

L 46286-65 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l) Pf-4 GS

ACCESSION NR: AT5009050 S/0000/64/001/000/0144/0151

AUTHOR: Shenbrot, I. M. (Moscow) 16 B+1

TITLE: Structure of centralized control machines

SOURCE: Konferentsiya po avtomaticheskomu kontrolyu i metodam elektricheskikh izmereniy. 3d, Novosibirsk, 1961. Avtomaticheskiy kontrol' i metody elektricheskikh izmereniy; trudy konferentsii, t. 1: Metody elektricheskikh izmereniy. Analiz i sintez sistem upravleniya i kontrolya. Elementy ustroystv avtomaticheskogo kontrolya (Automatic control and electrical measuring techniques; transactions of the conference. v. 1: Electrical measuring techniques. Analysis and synthesis of regulation and control systems. Elements of automatic control devices). Novosibirsk, Redizdat Sib. otd. AN SSSR, 1964, 144-151

TOPIC TAGS: centralized control, production control, control equipment/ 14

ABSTRACT: This is a review of various units used for centralized control of machinery, and describes various constructions of apparatus employed in American equipment. These include switches and switching relays, digital converters, printers, and display equipment. Simplified structural diagrams of the centralized-

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L 46286-65

ACCESSION NR: AT5009050

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control machines are presented, including some for the Soviet machines "Mars" (described by B. M. Yakobson in Proborostroyeniye, 1958, No. 7), "Zenit," and "Tsikl." Orig. art. has: 3 figures.

ASSOCIATION: None

SUBMITTED: 13Apr64 ENCL: 00 SUB CODE: IE, DP

NR REF SOV: 003 OTHER: 000

Card 2/2

L 28752-65 EWT(d)/EWP(1) Po-4/Pq-4/Pg-4/Pk-4/P1-4 IJP(c) BC

ACCESSION NR: AT5003304 S/2950/64/000/003/0055/0056

43
42
B+1

AUTHOR: Shenbrot, I.M.

TITLE: Systems of centralized control with sampled data inputs

SOURCE: EIKA, entsiklopediya izmereniy, kontrolya i avtomatizatsii (Encyclopedia of measurement, control, and automation), no. 3. Moscow, Izd-vo Energiya, 1964, 55-56

TOPIC TAGS: automatic control system, centralized control system, sampled data input, temperature regulation

ABSTRACT: The two main types of centralized control systems are the operational control systems and the control systems used for investigation of new technological processes. Because of the requirement of monitoring and control of many process parameters (in the form of outputs of various sensors), periodic sampling of all sensor outputs is usually employed. Since 1955, many such systems have been constructed. The following three examples are discussed: the MARS-200 system, designed for control and regulation of temperature at 200 different points; the sampler consists of electromagnetic relays and has a speed of about 3 points/second. The parameter values are printed out by an automatic typewriter (in red when out of tolerance and in black when

Card 1/2

L 28752-65

ACCESSION NR: AT5003304

within tolerance). Special readout requests are provided for. The accuracy of regulation and recording is ± 3C on a scale from 100 to 500C. The control system ELRV-2 is designed to control 56 parameters and has a mechanical rotating sampler whose full cycle is about 4 minutes (4.5 seconds per parameter sample). The maximum error is ± 1% of the scale reading. The dimensions are 1388x750x650 mm and the weight is about 350 kgm. The "Zenit -1" and "Zenit -2" systems can control 40 and 80 parameters, respectively. A rotating sampler samples 10 to 14 points per second and the input can accommodate sensor signals from 0 to 10 volts. Readout of all parameters, or only to those outside of their tolerance values, is available on an automatic typewriter. Readout can be periodic, on request or only when tolerances are exceeded. Orig. art. has: 2 figures.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii, Moscow (Central complex automation scientific research institute)

SUBMITTED: 00 ENCL: 00 SUB CODE: IE

NO REF SOV: 003 OTHER: 006

Card 2/2

BELONOGOV, Anatoliy Avrumovich; VAL'DENBERG, Yuriy Stanislavovich; MEDVEDEV, Leonid Ivanovich; Prinimal uchastiye LAVROVSKIY, A.K.; SHENBROT, I.M., red.

[illegible] electronic computers in the automation of industrial [illegible] Primenenie vychislitel'nykh mashin dlia avtomatizatsii proizvodstvennykh protsessov. Moskva, Energiia, [illegible] 23[illegible] p. (MIRA 17:12)

KUPERSHMIDT, Ya., kand. tekhn. nauk; SHENBROT, I.M., kand. tekhn. nauk

Reviews and bibliography. Priborostroenie no.5:32 My '65.
(MIRA 18:5)

L 2394-66 EWT(d)/EWP(1)/ IJP(c) BC

ACCESSION NR: AP5022987 UR/0103/65/026/008/1462/1468
62-502

27
B

AUTHOR: Shenbrot, I. M. (Moscow)

TITLE: Minimization of the error of digital integration in data logging

16

SOURCE: Avtomatika i telemekhanika, v. 26, no. 8, 1965, 1462-1468

TOPIC TAGS: data recording, random process, digital integrator, error minimization, mean square error

ABSTRACT: An analysis of digital integration errors of technological quantities using the fixed ordinate method in data logging has been given. The present article investigates the problem of minimizing the mean square error of the integral over a given time interval by appropriate selection of the recording period. Results of the theoretical discussion show that 1) all partial digital integration errors of a random process decrease with the number of readings n over the integration interval; 2) the accidental partial integration error caused by inaccuracies in measurements and level quantization is actually by a factor of $\sqrt{n}$ smaller than the corresponding error of a single measurement; 3) the systematic partial error caused by level quantization can be removed for all

Card 1/2

L 2394-66
ACCESSION NR: AP5022987

practical purposes by expansion of the digital transformation without synchronizing the start of the sweep with the counting pulses; 4) the digital integration is increased by independent detection of the integration time and of the number of digital registrations; and 5) for a given digital processing device there is a limit to the increase in the number of measurements; the paper presents formulas for the determination of the optimum number of measurements and of quantum levels. Orig. art. has: 27 formulas and 1 table.

ASSOCIATION: none

SUBMITTED: 26Oct63 ENCL: 00 SUB CODE: DP, MA

NO REF SOV: 005 OTHER: 000

Card 2/2

GULIY, V.M., SHENDAROVICH, D.Kh., brigadir sharoshechnogo bureniya (Sokol'nyy rudnik); BEKETOV, P.Ye.; DZHEMARDZHIDZE, N.M.; MOCHALIN, M.P.; PRIGOZHIN, Ye.I., gornyy inzhener (Metallicheskiy rudnik); POLISHCHUK, A.D.

Speeches by participants in a conference. Gor.zhur. no.1:20-24 Ja '56. (MLRA 9:5)

1. Nachal'nik Proizvodstvenno-tekhnicheskogo otdela Dzhezkazganskogo rudoupravleniya (for Dzhemardzhidze); 2. Nauchnyy sotrudnik Instituta gornogo dela AN SSSR (for Mochalin); 3. Glavnyy inzhener Ukrglavrudy (for Polishchuk); 4. Glavnyy inzhener Bystrushinskogo rudnika (for Guliy); 5. Glavnyy inzhener Salairskogo rudnika (for Beketov).
(Mining engineering) (Mining machinery)

[redacted], assistant:

Cultivation of rice. Semle-elie 27 no.3:43-44 Mr '65.
(MIRA 19:1)

SHEN E, Sh.T.; KOKORINA, L.M.

Effectiveness of [illegible] administered jointly with [illegible] fertilizers to rice. [illegible] 33 no.[illegible] (MIRA 18:[illegible])

1. Universitet druzhby narodov imeni Patrisa Lumumby i Kubanskaya risovaya opytnaya stantsiya. Submitted December 6, 19[illegible].

SHELDEL', V.F.

Projects should conform to present-day standards of structural engineering. Stroi. truboprov. no.9:18-19 S '64. (MIRA 17:10)

1. Trest Shkapovneftestroy, Jelebey, Bashkirskaya ASSR.

SEMCHUK, I.M., inzh.; SEREBRO, V.S., inzh.; TUHL', M.A., inzh.; SHCHIGOL'-SHENDELIS, L.Ye., inzh

Introducing water-cooled steel chill molds for large-scale cast iron castings. Mashinostroenie no.3:27-28 My-Je '65. (MIRA 18:6)

1. [illegible]'YAN, T.

2. U.S.S.R. (60)

4. Physicians in literature

7. Development of love for the medical profession. Fel'd. i akush., No. 2, 1952

9a Monthly List of Russian Accessions, Library of Congress, April 1953. UNCLASSIFIED.

[illegible] butter using the vacuum
[illegible] proizvodstvo slivochnogo
[illegible] Moskva,
[illegible] pishchevoi pro-
(MIRA 16.5)

SHENDER, K. I.

Development of connected oral communication in young school children. Nauk. zap. Nauk.-dosl. inst. psykhol. 11:105-109 '59. (MIRA 13:11)

1. Pedagogicheskiy institut, Zhitomir.
(Children--Language)

V. Hexanitrite complexes of iridium, rhodium, and cobalt. V. V. Lebedinskii and E. V. Stenderetskaya. *Issest. Sektora Platiny i Drug. Blagorod. Metal., Inst. Obshchei i Neorg. Khim., Akad. Nauk S.S.S.R.* No. 29, 61–6(1955).— The existence of the $(NH_4)_3Na[M(NO_2)_6]$ type of compds. has been discovered and confirmed by the synthesis of corresponding Ir, Rh, and Co derivs. A 3 aq. soln. of $NaNO_2$ reduced the Ir(IV) of chloroiridic acid to Ir(III). With excess of $NaNO_2$ and upon heating sodium iridium(III) hexanitrite (I) was formed by the reaction: $2H_2[IrCl_6] + 18NaNO_2 \rightarrow 2Na_3[Ir(NO_2)_6] + 12NaCl + 3NO + 3NO_2 + 3H_2O$. When to the soln. of I, contg. excess of Na^+, NH_4Cl was added, green-yellow needles of ammonium sodium iridium(III) hexanitrite (II), $(NH_4)_2Na[Ir(NO_2)_6]$, pptd. out. This new compd. is slightly sol. in water and s insol. in ethanol. The crystals are optically anisotropic. Under similar conditions ammonium sodium rhodium(III) hexanitrite (III) was obtained according to: $Na_3Rh(NO_2)_6 + 2NH_4Cl \rightarrow (NH_4)_2Na[Rh(NO_2)_6] + 2NaCl$. X-ray study showed that the bond lengths in III are: Na-O 2.03 A. and NH_4-O 3.17 A. When $Na_3[Co(NO_2)_6]$, obtained by oxidation with air of a aq. soln. of $Co(NO_3)_2$ with $NaNO_2$ in the presence of AcOH, was treated with excess of NH_4Cl, fine yellow crystals of $(NH_4)_2Na[Co(NO_2)_6]$ were formed. In $(NH_4)_3[Co(NO_2)_6]$ the 3 ammonium ions are crystallographically different: two ions are surrounded by 12 oxygen atoms from 12 NO_2 groups and the third NH_4^+ is encircled by 12 oxygen atoms from 6 NO_2 groups. A. P. Kotlyar

SHENDERETSKAYA, A. V.

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8
8

2

New ammino sulfite compounds of rhodium. II. V. V. Lebedinskiĭ and E. V. Shenderetskaya. *Izvest. Sektora Platiny i Drug. Blagorodnykh Metallov Inst. Obshchel i Neorg. Khim., Akad. Nauk S.S.S.R.* 30, 99–105(1955); cf. *C.A.* 44, 10565*a*; 50, 6243*c*.—$NaRh4NH_32SO_3.2H_2O$ is formed in the interaction of Na_2SO_3 and $[Rh(NH_3)_5Cl]Cl_2$(I). With $(NH_4)_2SO_3$ I forms $NH_4Rh4NH_32SO_3.3.5H_2O$, and with $K_2S_2O_5$, $KRh4NH_32SO_3.1.5H_2O$. Molar elec. cond. measurements showed that the K and NH_4 salts are binary electrolytes, $M[Rh(NH_3)_4(SO_3)_2]$; an equil. is established in aq. solns. of the sodium salt: $Na[Rh(NH_3)_4(SO_3)_2] \rightleftarrows [Rh(NH_3)_4SO_3(SO_3Na)]$. The complex compds. obtained are very stable, are not destroyed by concd. HCl at the b.p., and do not react with an excess of ammonia.

W. M. Sternberg

PM

LEBEDINSKIY, V.V.; SHENDERETSKAYA, Ye.V.

Complex nitroammonium compounds of rhodium. Part 2. Izv.Sekt. plat.i blag.met. no.31:53-55 '55. (MLRA 9:5)
(Rhodium compounds) (Compounds, Complex)

LEBEDINSKIY, V.V. [deceased]; SHENDLERETSKAYA, Ye.V.

Part 3: Rhodium sulfite and sulfiteammonium compounds. Zhur. neorg. khim. 2 no.8:1768-1774 Ag '57. (MIRA 11:3)
(Rhodium compounds)

5(2) SOV/80-32-4-41/47

AUTHORS: Lebedinskiy, V.V., Shenderetskaya, Ye.V and Mayorova, A.G.

TITLE: The Preparation of Spectrally Pure Rhodium (Polucheniye spektral'no-chistogo rodiya)

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 4, pp 928-929 (USSR)

ABSTRACT: To obtain chemically pure rhodium metal, the triammine-trichloride method proposed by V.V. Lebedinskiy has been extensively used. The product obtained by this method, although corresponding to a grade of chemically pure, still does not meet high purity requirements for manufacturing certain physical devices. In order to remove the remaining impurities, the authors propose to apply the sulfite method which they describe in detail. The essence of this method consists in the dissolving of rhodium triammine-trichloride in the boiling solution of the ammonium sulfite which results in the formation of the sulfite compound of rhodium, $(NH_4)_3[Rh(SO_3)_3]$. By a series of subsequent operations and by roasting, rhodium metal is obtained, in which

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The Preparation of Spectrally Pure Rhodium SOV/80-32-4-41/47

even traces of impurities, such as Pt, Pd, Ir, Cu and Fe, are not detected by spectral analysis

ASSOCIATION Institut obshchey i neorganicheskoy khimii imeni N.S Kurnakova AN SSSR (Institute of General and Inorganic Chemistry imeni N.S. Kurnakov of the AS USSR)

SUBMITTED: November 17, 1958

Card 2/2

CHERNYAYEV, I.I.; SHENDERETSKAYA, Ye.V.; Karyagina, A.A.

Monovalent rhodium formates. Zhur.neorg.khim. 5 no.5:1163 My '60. (MIRA 13:7)
(Rhodium compounds) (Formic acid)

BABAYEVA, A.V.; KHARITONOV, Yu.Ya.; SHENDERETSKAYA, Ye.V.

Infrared absorption spectra of rhodium (III) complex compounds with an inner-sphere sulfito group. Zhur.neorg.khim. 7 no.7:1530-1537 Jl '62. (MIRA 16:3)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.Kurnakova AN SSSR.

(Rhodium compounds—Spectra)

AVTOKRATOVA, T.D.; ANDRIANOVA, O.N.; BABAYEVA, A.V.; BELOVA, V.I.; GOLOVNYA, V.A.; DERBISHER, G.V.; MAYOROVA, A.G.; MURAVEYSKAYA, G.S.; NAZAROVA, L.A.; NOVOZHENYUK, Z.M.; ORLOVA, V.S.; USHAKOVA, N.I.; FEDOROV, I.A.; FILIMONOVA, V.N.; SHENDERETSKAYA, Ye.V.; SHUBOCHKINA, Ye.F.; KHANANOVA, E.Ya.; CHERNYAYEV, I.I., akademik, otv. red

[Synthesis of complex compounds of platinum group metals; a handbook] Sintez kompleksnykh soedinenii metallov platinovoi gruppy; spravochnik. Moskva, Izd-vo "Nauka," 1964. 338 p. (MIRA 17:5)

1. Akademiya nauk SSSR. Institut obshchey i neorganicheskoy khimii. 2. Institut obshchey i neorganicheskoy khimii AN SSSR (for all except Chernyayev).

CHERNYAYEV, I.I.; SHENDERETSKAYA, Ye.V.; MAYOROVA, A.G.; KORYAGINA, A.A.

Rhodium formate compounds. Zhur. neorg. khim. 10 no.3: 577-579 F '65. (MIRA 18:11)

1. Submitted July 20, 1964.

[redacted]

1. [redacted]

2. USSR (600)

4. [redacted]; Gladioulus

7. Experiments in the development of Cold-resistant Gladioli, Agrobiologiia No. 2, 1952, Kandidat S.-Kh. Nauk Botanicheskiy sad Moskovskogo Gosudarstvennogo Universiteta imeni M. V. Lomonosova.

9.

DEMEZER, A.A.; DZYUBA, M.L.; BLINOV, L.F. kandidat sel'skokhozyaystvennykh nauk; BOLDYREV, N.I., kandidat pedagogicheskikh nauk; GAY-GULINA, Z.S, GRUDEV, D.I., kandidat sel'skokhozyaystvennykh nauk; DUBROV, Ya.G., professor; KOVALENKO, V.D., ;KRYSINA, O.I.; KURKO, V.I.; LEVI M.F., kandidat sel'skokhozyaystvennykh nauk; MORDKOVICH, M.S.; POPOV, I.P. kandidat biologicheskikh nauk;SAGALOVICH, Ye.N., agronom; SILIN, V.N, zootekhnik; STRUYANSKIY, I.L., vrach; SUSHKOVA-LYAKHOVICH, M.L., kandidat meditsinskikh nauk; SHAPOVALOV, Ya.Ya., kandidat sel'skokhozyaystvennykh nau; SHENDERETSKIY, E.I., kandidat sel'skokhozyaystvennykh nauk; YAVNEL', A.Yu., kandidat meditsinskikh nauk; RODINA, P.I., redaktor; YUROVITSKIY, Ye.I., redaktor;PEVZNER, V.I., tekhnicheskiy redaktor.

[Home economics] Domovodstvo. Moskva, Gos.izd-vo sel'khoz.lit-ry. 1956. 479 p. (MLRA 10:5)

(Home economics)

GOTLIB Ye.A., inzhener; POYGIN, A.V., inzhener; SHENDEROV, A.I. inzhener.

Checking the quality of welded joints of tubes of heating surfaces. Elek.Sta. 27 no.11:41-43 N '56. (MIRA 10:1)
(Gamma rays--Industrial applications) (Boilers)

GOTLIB, Ye.A., inzhener; POIGIN, A.V., inzhener; SHENDEREY, A.I., inzhener.

Experience in welding pipes. Elek.sta. 28 no.9:78-79 S '57.
(MIRA 10:11)

(Pipe--Welding)

TSIKLIS, D.S.; MUSHKINA, Ye.V.; SHENDEREY, L.I.

Phase equilibriums in the ethylene water system at high temperatures and pressures [with summary in English]. Inzh.-fiz. zhur. 1 no.8:3-7 Ag '58. (MIRA 11:8)

1.Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti, Moskva.
(Phase rule and equilibrium)

5(4) SOV/76-33-9-20/37

AUTHORS: Tsiklis, D. S., Kofman, A. N., Shenderey, L. I.

TITLE: Phase- and Volumetric Behavior of Solutions of Acetylene in Acetone

PERIODICAL: Zhurnal fizicheskoy khimii, 1959, Vol 33, Nr 9, pp 2012-2016 (USSR)

ABSTRACT: G. S. Cherkasova and L. F. Abramova (NIAT) took part in the experimental part of the work under review. As there are no accurate data in publications concerning the volumetric behavior of solutions of acetylene (I) in acetone (II), the present investigation was carried out following suggestions made by Yu. V. Dalago and G. F. Chepelyugin. The solubility of (I) in (II) was measured according to the statistical method by measuring the total pressure over the solution at a given temperature and known concentration of the solution; a special arrangement was used for the purpose (Fig 1). The device essentially consists of a graduated tube with tap, glass manometer (as zero instrument), mercury gauge, and portioning vessel. The working procedure is described. The solubility of (I) in (II) was measured at -40, -50, -60, -70 and -80°C at a

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Phase- and Volumetric Behavior of Solutions of Acetylene in Acetone

pressure up to 1 atm, and the volume of the solution was determined. To interpret results for the phase equilibrium, the known equation (1) (Ref 5) was applied and the values obtained are specified (Table 1). With the (I)-concentration the volume of the solution rises noticeably (Table 2). By extrapolation, the solubility of (I) in (II) was determined at -50°C even for a pressure above 1000 torr (Table 3). The solubility of (I) in (II) may be expressed by the equation of I. R. Krichevskiy - A. A. Il'inskaya. The solution heat of (I) in (II) was likewise calculated. Finally, gratitude is expressed to I. R. Krichevskiy for valuable advice. There are 5 figures, 3 tables, and 8 references, 5 of which are Soviet.

SUBMITTED: February 26, 1958

Card 2/2

S/064/60/000/005/005/009
B015/B058

AUTHORS: Tsiklis, D. S., Kulikova, A. I., Shenderey, L. I.

TITLE: Phase Equilibrium in the System Ethanol - Ethylene - Water at High Pressures and High Temperatures

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 5, pp. 49 - 54

TEXT: Specific data on the phase equilibrium in the three-component system water-ethylene-ethanol at a pressure of up to 200 atm and temperatures between 200° and 300°C must be known for the ethylene hydration under rational technological conditions. Present investigations were conducted for this purpose according to the static method. V. I. Alisova participated in the experimental part of the work. Four solutions with 2.3, 6.1, 10.5, and 21.5 mole% ethanol in water were investigated, the composition of the coexisting phases in the system ethanol-water was determined for 300°C (Table 1), and the corresponding values for 200° and 250°C were taken from publications. The interpolated values of the composition of the liquid and gas phase of the systems ethanol-water, water-ethylene and ethanol-ethylene-water

Card 1/2

Phase Equilibrium in the System Ethanol - Ethylene - Water at High Pressures and High Temperatures

S/064/63/000/005/005/009
B015/B058

(Tables 2,3) were defined from these data. The diagrams mentioned (Figs. 1-9) show that critical phenomena occur in the mentioned three-component system for the temperature- and pressure ranges investigated. It is established that the ethanol concentration decreases in the co-existing liquid solutions with the pressure- and temperature increase. It is shown that the formation of two liquid phases is possible at temperatures of up to 100°C under pressure, the one being able to contain 70% in weight of ethanol and more, which would make it possible to achieve a considerable improvement in the rectification. There are 9 figures, 3 tables, and 8 references: 3 Soviet, 3 US, and 2 German.

Card 2/2

TSIKLIS, D.S.; KLIKOVA, A.I.; SHENDEREY, L.I.

Phase equilibrium in the system ethanol - ethylene - water at high pressures and temperatures. Khim.prom. no.5:401-406 Jl-Ag '60. (MIRA 13:9)

(Ethanol) (Ethylene) (Phase rule and equilibrium)

AUTHORS: Tsiklis, D. S., Shenderey, L. I., Kofman, A. N. (Moscow)

S/076/60/034/03/014/038
B115/B016

TITLE: Phase Equilibria in the System Acetaldehyde - Carbon Dioxide

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol 34, Nr 3, pp 585-586 (USSR)

TEXT: The investigation of the phase equilibrium in the system acetaldehyde - carbon dioxide was carried out in a device already previously described (Refs 1,2) according to an operational method also described there. The system was investigated at 1, 25, and 50° and pressures of up to 100 atm. The carbon dioxide applied was purified and its purity checked. The results obtained are given in a diagram (Figure) and a table. It may be seen from the figure that liquid acetaldehyde and carbon dioxide are miscible in any ratio at temperatures below the critical temperature of CO_2. At temperatures above the critical temperature of CO_2 the critical processes set in. The authors did not succeed in expressing the data for this system by the equation of I. R. Krichevskiy and N. Ye. Khazanova (Ref 3). The system carbon dioxide - acetaldehyde belongs to the concentrated solutions, the treatment of which is extremely difficult. There are 1 figure, 1 table, and 4 references, 3 of which are Soviet.

SUBMITTED: June 10, 1958

Card 1/1

TSIKLIS, D.S.; SHENDEREY, L.I.; KOFMAN, A.N. (Moscow)

Solubility of acetaldehyde in compressed gases. Zhur. fiz. khim. 34 no.4: 768-772 Ap '60. (MIRA 14:5)
(Acetaldehyde) (Nitrogen) (Hydrogen)

84694

S/020/60/134/004/021/023
B004/B064

11.1210

AUTHORS: Tsiklis, D. S., Kulikova, A. I., and Shenderey, L. I.

TITLE: The Volumes of Gaseous Solutions of Water in Ethylene at High Pressures and Temperatures

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 134, No. 4, pp. 887-890

TEXT: The authors used a piezometer of constant volume to study the volumes of saturated solutions of water in compressed ethylene at 200 - 300°C and 100 - 150 atm. The apparatus is schematically shown in Fig. 1. A certain amount of water and ethylene was filled into the piezometer. Then, it was heated and stirred with a magnetic mixer, and pressure and temperature were measured. Samples were taken from the piezometer in portions, their water was condensed in an ampoulle, and their ethylene collected in evacuated flasks. The solution was mixed after each sample taking, and the pressure measured. Table 1 shows the experimental data. Fig. 2

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The Volumes of Gaseous Solutions of Water in Ethylene at High Pressures and Temperatures

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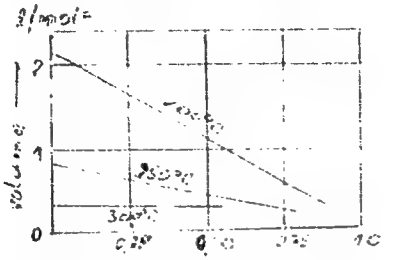
B004/B061



shows the water volumes in ethylene in the saturated state obtained by extrapolation. The authors represent the behavior of the solutions by the virial equation $pv = RT\left[1 + B(T)/v + C(T)/v^2\right]$ (1). To determine the virial coefficient, (1) was transformed: $\left[(pv/RT) - 1\right]v = B + C/v$ (2). The values on the left-hand side of equation (2) result in straight lines from whose ordinate section and inclination the authors determined B_p and C_p, respectively for the mixture given. To find the virial

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The Volumes of Gaseous Solutions of Water in Ethylene at High Pressures and Temperatures

S/020/60/134/004/021/023
B004/B064

coefficients for any concentration, the authors calculated, by means of the equations $B_p = B_{11}N_1^2 + 2B_{12}N_1N_2 + B_{22}N_2^2$ (3) and $C_p = C_{111}N_1^3 + 3C_{112}N_1^2N_2 + 3C_{122}N_1N_2^2 + C_{222}N_2^3$ (4), the virial coefficients B_{11}, B_{22}, C_{111}, C_{222} for pure ethylene and water, and B_{12}, C_{112}, C_{122} for the binary and ternary interactions. These values are given in Table 2. The pressure was calculated from equation (1). Table 3 shows a good agreement between the measured and the calculated pressure. Accordingly, equation (1) yields correct results for the range in question. The authors thank I. R. Krichevskiy for advice. V. I. Alisova took part in experimenting. There are 2 figures, 3 tables, and 6 references: 4 Soviet, 2 US, and 1 German.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza (State Scientific Research and Planning Institute of the Nitrogen Industry and the Products of Organic Synthesis)

The Volumes of Gaseous Solutions of Water in Ethylene at High Pressures and Temperatures

S/020/60/134/004/021/023
B004/B064

PRESENTED: May 18, 1960, by A. N. Frumkin, Academician

SUBMITTED: May 18, 1960

Card 4/4

TSIKLIS, D.S.; KULIKOVA, A.I.; SHENDEREY, L.I.

Calculation of the thermodynamic properties of gaseous solutions of water in ethylene and the plotting of thermal diagrams. Khim.prom. no.1:52-56 Ja '62. (MIRA 15:1)
(Ethylene) (Water) (Thermodynamics)

TSIKLIS, D.S.; KULIKOVA, A.I.; Prinimali uchastiye: SHENDEREY, L.I.; ALISOVA, V.I.

Chemical equilibrium in the system ethylene - water - ethyl alcohol at high pressures and temperatures. Khim.prom. no.6:413-418 Je '62. (MIRA 15:11)
(Ethylene) (Ethyl alcohol) (Chemical equilibrium)

TSIKLIS, D.S.; SHENDEREY, L.I.; EL'YATANOV, A.I.

Phase and volume ratios in the system toluene - nitrogen.
Khim. prom. no.5:348-353 My '63. (MIRA 16:8)

TSKILIS, D.S.; SHENDEREY, L.I.; Prinimala uchastiye GORYUNOVA, N.P.

Solubility of oxygen-nitrogen mixtures in toluene. Khim.prom. no.9:690-691 S '63. (MIRA 16:12)

TSIKLIS, D.S.; SHENDEREY, L.I. Prinimala uchastiye GORYUNOVA, N.P.

Phase equilibria in the system ber- ic acid - toluene - nitrogen.
Khim. prom. 40 no.11:841-843 N '64 (MIRA 18:2)

5(4),5(1)

AUTHORS: Shenderey, Ye.M., Zel'venskiy, Ya. D., Ivancvskiy, F. P.

SOV/64-59-4-13/27

TITLE: Solubility of Carbon Dioxide in Methanol at Deep Temperature Under Pressure (Rastvorimost' dvuokisi ugleroda v metanole pri nizkoy temperature pod davleniyem)

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 4, pp 50-53 (USSR)

ABSTRACT: For the purpose of purifying the synthesis-gas of sulfur compounds and carbon dioxide (I), and of extracting the acetylene from combustion gases (Refs 1-4) a gas absorption in organic solution mediums at deep temperatures (-25 to -60°) and a pressure of from 10-30 atmospheres is used. Methanol (II) proved to be the best means of absorption of this kind (Ref 5). The determination results concerning the solubility of (I) in (II) at -26, -36, -45, and -60° under pressure are given. The determinations were made according to a static method in an arrangement (Fig 1) which is in principle similar to that of (Ref 8). The autoclave and the piezometer were mounted in a thermostat. The pressure was measured with a spring-manometer, and the temperature by means of a copper/Constantan-thermo-couple

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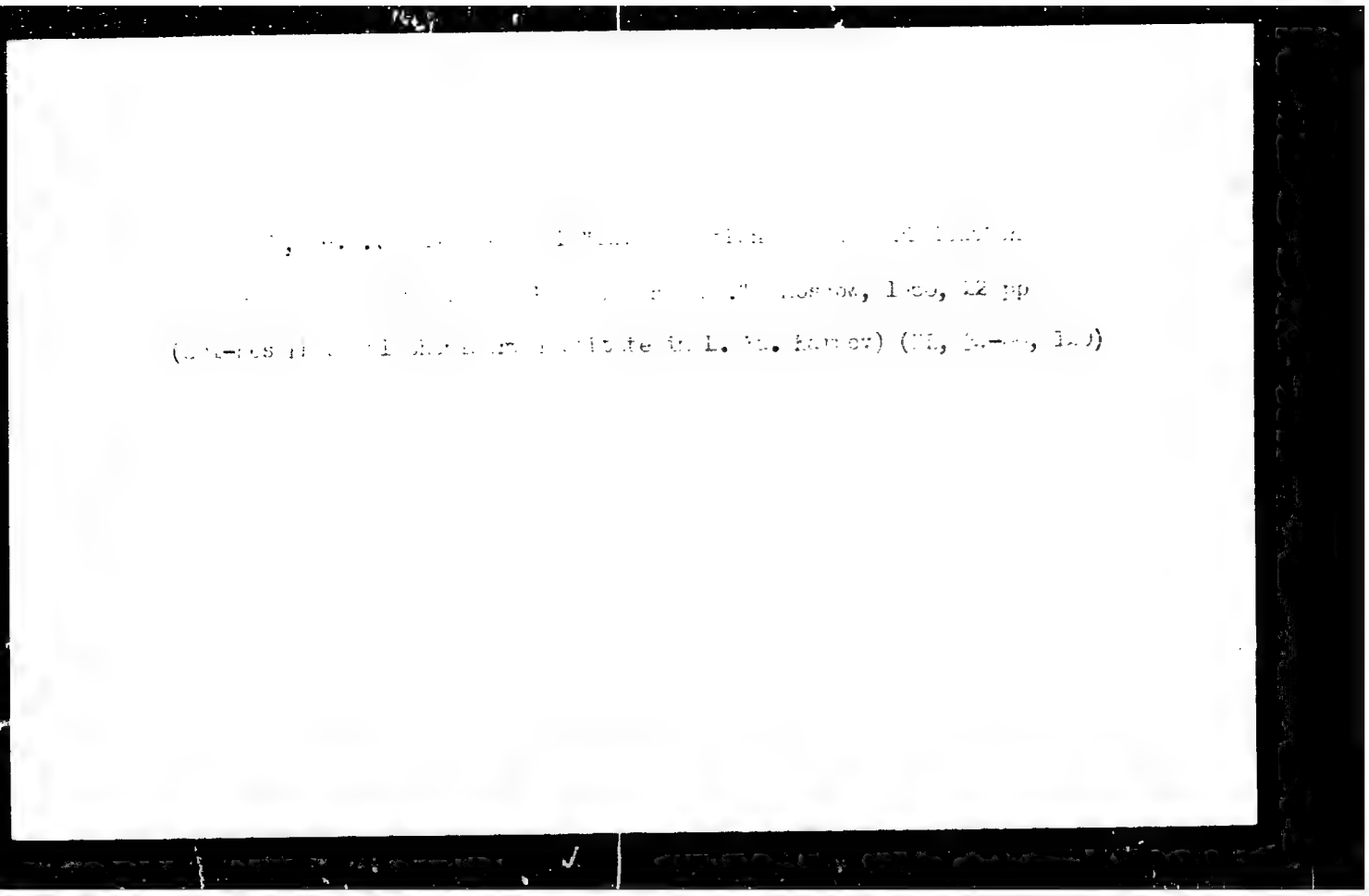
via a potentiometer PPTN. The measuring results obtained (Table 1, Figs 2,3 Isotherms) show that the solubility of (I) in (II) at given conditions is very high, and that for instance, if the pressure is equal, at -45° 70 times more of (I) is dissolved in (II) than at +25° in water. With (I) concentrations under 20 mol% the solubility increases proportionally with the pressure. In this interval the molar concentration of (I) in the solution may be calculated by multiplying the corresponding pressure of (I) with a coefficient. The solution heat of (I) in (II) was calculated from the temperature function of solubility (4050 kcal/mol). The densities of concentrated (I)-solutions in (II) (Table 2) were determined, and it was found that the molar volume of the (I)-solution in (II) is an additive composition of the liquid (I) and (II) with a deviation up to 2%. There are 6 figures, 2 tables, and 9 references, 5 of which are Soviet.



85609

S/064/60/000/005/011/021/XX
B024/B070

17 1153

AUTHORS: Shendrey, Ya. R., Zelvenskiy, Ya. D., Ivanovskiy, F. P.

TITLE: The Solubility of Carbon Dioxide in Methyl Ethyl Ketone, Ethyl Acetate, and Toluene at Low Temperatures Under Pressure

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 5, pp. 18 - 22

TEXT: As the process of purification and extraction of gases by means of absorption at low temperatures is becoming more and more important for industry, a study is made here of the gas solubility in different solvents. The solubility of carbon dioxide in methyl ethyl ketone, ethyl acetate, and toluene has been examined at -25, -35, and -45°C, and pressures up to 16 atm. The solutions were found to be almost ideal. It is found from the analysis of the experimental results that the equation of I. P. Krichevskiy (Ref.5) for dilute solutions of nonelectrolytes is valid for the systems studied only if the concentration of CO_2 is not more than 10-15 mole%. The equation is:

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35609

The Solubility of Carbon Dioxide in Methyl Ethyl Ketone, Ethyl Acetate, and Toluene at Low Temperatures Under Pressure

S/064/60/000/005/011/021/XX
B024/B070

RT ln f_2/N_2 = RT ln K + A' N_2 (') (f_2 - volatility of CO_2; N_2 - molar fraction of CO_2 in the solution; A' - a coefficient depending on the pressure but not on the composition of the gas; K - Henry coefficient). This equation is a generalization of the equation of Sechenov (Ref.5) to binary systems. From the results of the experiments methyl ethyl ketone and ethyl acetate may be recommended as the most efficient solvents for CO_2. There are 8 figures, 4 tables, and 6 references: 3 Soviet, 1 German, 1 US, and 1 British.

Card 2/2

SHENDEREY, Ye. R.; ZEL'VENSKIY, Ya.D.; IVANOVSKIY, F.P.

Solubility of the mixture of carbon dioxide and hydrogen in methyl alcohol at low temperature under pressure. Khim.prom. no.5:308-312 My '61. (MIRA 14:6)
(Carbon dioxide) (Hydrogen) (Methanol)

SHENDEREY, Ye.R.; ZEL'VENSKIY, Ya.D.; IVANOVSKIY, F.P.

Solubility of carbon dioxide in methyl ethyl ketone, ethyl acetate, and toluene under pressure and at a low temperature. Khim.prom. no.5:370-374 Jl-Ag '60. (MIRA 13:9)
(Carbon dioxide)

S/081/61/000/020/064/089
B105/B147

AUTHORS: Shenderey, Ye. R., Zel'venskiy, Ya. D., Ivanovskiy, F. P.

TITLE: Solubility of hydrogen, nitrogen, and methane in methanol under pressure and at low temperatures

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 283, abstract 20K72 (Gaz. prom-st', no. 3, 1961, 42-45)

TEXT: The experimental data that were obtained by examining the solubility of H_2, N_2, CH_4 in CH_3OH at a pressure of up to 80 atm, and at $t = 0\text{-}60^{\circ}C$ can be well described by equations for dilute solutions of nonelectrolytes. The solubility of H_2 in the considered temperature range decreases with a drop of t. The sign of the temperature coefficient of N_2 solubility changes at $t \approx 10^{\circ}C$. The heat of solution of H_2, N_2, and CH_4 in CH_3OH was calculated on the basis of experimental data.

[Abstracter's note: Complete translation.]

Card 1/1

SHENDEREY, Ye.R.; ZEL'VENSKIY, Ya.D.; IVANOVSKIY, F.P.

Solubility of ethylene in methanol at low temperatures. Zhur.-prikl.khim. 35 no.3:690-693 Mr '62. (MIRA 15:4)
(Ethylene) (Methanol)

SHENDEREY, Ye.R.; ZEL'VENSKIY, Ya.D.; IVANOVSKIY, F.P. (Moskva)

Ethylene solubility in acetone, methyl ethyl ketone, and toluene at low temperatures. Zhur. fiz. khim. 36 no.4:800-807 Ap '62. (MIRA 15:6)

1. Gosudarstvennyy institut azotnoy promyshlennosti.
(Ethylene) (Solvents)

SHENDEREY, Ye.R.; IVANOVSKIY, F.P.

Separation of acetylene from gases yielded during thermal oxidative pyrolisis of hydrocarbons by using a selective solvent. Khim.prom. no.9:650-655 S '63. (MIRA 16:12)

SHEMBLEY, Ye.N.; IVANOVSKIY, F.P.

Solubility of acetylene, ethylene, propylene, and carbon dioxide in dimethyl formamide at low temperature. Gaz. prom. 7 no.8:38-44 '62. (MIRA 17:10)

SHENDEREY, Ye.R.; IVANOVSKIY, F.P.

Solubility of carbon dioxide in aqueous solutions of dimethylformamide at low temperature. Zhur. fiz. khim. 37 no.9:2125-2127 S '63. (MIRA 16:12)

1. Gosudarstvennyy nauchno-issledovatel'skiy institut azotnoy promyshlennosti i produktov organicheskogo sinteza.

SHENDEREY, Ye.R.; IVANOVSKIY, F.I.; Prinimal uchastiye [illegible]
SERGEYEVA, L.Ye.; DORFMAN, I.M.

Solubility of acetylene in acetone at low temperatures. Zhur. prikl.khim. 37 no.7:1557-1562 Jl '64.

SHLEYNIKOV, V.M.; TAGINTSEV, B.G.; Prinimali uchastiye: IVANOVSKIY, F.P.; SHENDEREY, Ye.R.

Separating acetylene from gases obtained by the electrocracking of methane at low temperatures. Gaz. prom. 9 no.6:38-42 '64. (MIRA 17:8)

SHENDEREY, Ye.R.

Henry coefficients for ethylene and carbon dioxide in acetone containing acetylene at low temperatures. Zhur.prikl.khim. 38 no.9:2126-2128 S '65. (MIRA 18:11)

SHENDEREY, Ye.R.

Solubility of acetylene, methylacetylene, propadiene and diacetylene in n-octane. Khim. prom. 41 no.8:580-585 Ag '65. (MIRA 18:9)

SHNDERIKHIN, I.M.; SHARAVSKIY, P.V.

Investigating the characteristics of germanium diodes. Fiz.tver. tela 2 no.7:1497-1505 Jl '60. (MIRA 13:8)

1. Leningradskiy Inzhenerno-stroitel'nyy institut, kafedra fiziki.
(Germanium diodes)

POPOV, Yu.I., inzhener; SHENDEROV, A.I., inzhener; MARICHEV, V.P., inzhener; SLIZKIY, P.I., inzhener.

Excavators built by the Novo-Kramatorsk machinery building plant. Gor.zhur. no.1:47-54 Ja '56. (MLRA 9:5)
(Excavating machinery)

SHENDEROV, A.I., inzh.; LOMAKIN, V.P., inzh.; KAMINSKAYA, D.A., inzh.; KALASHNIKOV, Yu.T., inzh.

Increasing the productivity of high-powered steam shovels by automation of the digging process. Stroi. i dor. mash. 6 no.2:4-7 F '61. (MIRA 14:5)

(Power shovels)

VETROV, Yu.A.; MARICH, E.V.; KRASNIKOV, A.S.; CHERNEGOV, Yu.A.; SHENDEROV, A.I.

Selecting the efficient operating conditions for a high-capacity rotary excavator. Ugol' 37 no.9:26-29 S '62. (MIRA 15:9)

(Excavating machinery)

GRIGAS, V.A.; GEYER, D.M.; SHENDEROV, A.I.; Martynov, A.S.

Walking, movable equipment. Gor. zhur. no.2:76 F '65.
(MIRA 18:4)